

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft Louisiana Pollutant Discharge Elimination System Permit No. LA0117927; AI 115894; PER20050001 to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Southeastern Louisiana Water & Sewer Company, LLC
Tallow Creek Sewage Treatment Plant
350 North Causeway Boulevard
Mandeville, LA 70448
- II. **PREPARED BY:** Todd Franklin
- DATE PREPARED:** February 6, 2006
- III. **PERMIT ACTION:** Revoke and reissue LPDES permit LA0117927, AI 115894; PER20050001 for the increase in design capacity of the Tallow Creek Sewage Treatment Plant from 0.11 MGD to 0.155 MGD. Currently, there are no homes connected to the treatment plant. The original plan for the facility was to connect up to 265 homes to the plant. However, plans have changed to connect up to 365 homes.

LPDES application received: December 13, 2005

EPA has not retained enforcement authority.

LPDES permit issued: April 1, 2005

LPDES permit expires: March 31, 2010

IV. **FACILITY INFORMATION:**

- A. The application is for the discharge of treated sanitary wastewater from a privately owned treatment facility serving the Tallow Creek Subdivision.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located on LA Highway 1085 at Seegen Road, southwest of Covington, St. Tammany Parish.
- D. The treatment facility consists of extended aeration with an activated sludge return process and tertiary sand filter. Disinfection is by chlorination.
- E. Outfall 001

Discharge Location: Latitude 30° 28' 1" North
 Longitude 90° 9' 15" West

Description: treated sanitary wastewater

Average Expected Flow: 365 homes @ 400 GPD each = 0.146 MGD

Calculations for gallons per day were based upon figures obtained from Chapter 15 of the State of Louisiana Sanitary Code, Department of Health and Hospitals, Office of Public Health.

Design Flow: 0.155 MGD

Type of Flow Measurement which the facility is currently using: Continuous Recorder

V. RECEIVING WATERS:

The discharge is into an unnamed ditch; thence into Soap and Tallow Branch; thence into the Tchefuncte River; thence into Lake Pontchartrain in Subsegment 040801 of the Lake Pontchartrain Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 040801 of the Lake Pontchartrain Basin are as indicated in the table below^{1/}:

Overall Degree of Support for Segment	Degree of Support of Each Use						
Partial	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Not Supported	Full	Not Supported	Full	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 040801 of the Lake Pontchartrain Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 040801 of the Lake Pontchartrain Basin, is listed in Section II.2 of the Implementation Strategy in a letter dated October 21, 2005, from Watson (FWLS) to Gautreaux (LDEQ), as a habitat for the Gulf Sturgeon, which is listed as an endangered species. No consultation is needed, as instructed in the March 22, 1996, Memorandum of Understanding (MOU) between LDEQ and FWLS, since this source is for a minor sanitary discharge.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written

comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Todd Franklin
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX.

PROPOSED PERMIT LIMITS:

Subsegment 040801, Tchefuncte River and Tributaries-Headwaters to confluence with Bogue Falaya River, is listed on LDEQ's Final 2004 303(d) List as impaired for pathogen indicators and mercury. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Lake Pontchartrain Basin, those suspected causes for impairment which are not directly attributed to the sanitary wastewater point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

Pathogen Indicators

To protect against the development of pathogenic organisms in the receiving waterbodies, fecal coliform limits have been established in the general permit.

Mercury

To protect against the discharge of mercury at levels exceeding the state water quality standards and for informational purposes for future TMDL development, a reporting requirement for mercury shall be placed into the permit.

Interim Effluent Limits:

OUTFALL 001

Interim limits shall become effective on the effective date of the permit and expire at the point where there are 250 homes connected to the sewage treatment plant or the daily flow reaches 100,000 GPD.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD ₅	---	10 mg/l	15 mg/l	Limits are set in accordance with a model performed by the Water Quality Assessment Division of LDEQ which was performed during the issuance of the previous permit.
TSS	---	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen	---	5 mg/l	10 mg/l	Limits are set in accordance with the St. Tammany Parish Areawide Policy for facilities of this treatment type and size.
Mercury	---	Report	Report	Because the receiving waterbody is impaired for mercury, "Report" of mercury is proposed for information gathering purposes.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.).

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

Final Effluent Limits:**OUTFALL 001**

Final limits shall become effective at the point where there are 250 homes connected to the sewage treatment plant or the daily flow reaches 100,000 GPD and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD ₅	12.9	10 mg/l	15 mg/l	Limits are set in accordance with a model performed by the Water Quality Assessment Division of LDEQ which was performed during the issuance of the previous permit.
TSS	19.4	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen	6.5	5 mg/l	10 mg/l	Limits are set in accordance with the St. Tammany Parish Areawide Policy for facilities of this treatment type and size.
Mercury	Report	Report	Report	Because the receiving waterbody is impaired for mercury, "Report" of mercury is proposed for information gathering purposes.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for

this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) **pH**

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.).

3) **Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X.

PREVIOUS PERMITS:

LPDES Permit No. LA0117676: Issued: April 1, 2005
Expired: March 31, 2010

Final Effluent Limitations

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
CBOD ₅	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Ammonia-Nitrogen	5 mg/l	10 mg/l	2/month	Grab
Fecal Coliform				
Colonies/100 ml	200	400	2/month	Grab
pH	Range – 6.0 su – 9.0 su		2/month	Grab
Mercury	Report	Report	1/quarter	Grab

XI.

ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

An inspection conducted for this facility on September 8, 2005, to assessment damages from Hurricane Katrina revealed that the facility was operating normally and there was no evidence of flooding.

B) Compliance and/or Administrative Orders

A review of the files indicates that Administrative Order WE-AO-03-1014 was issued for this facility on December 5, 2003. The Administrative Order listed interim limits for the facility until such time that a permit was issued.

C) DMR Review

A review of the discharge monitoring reports for the period beginning December 2003, through June 2006, has revealed no effluent violations (DMRs for the month December 2004 was missing from the file).

XII. ADDITIONAL INFORMATION:

Please be aware that the Department will be conducting a TMDL in the Lake Pontchartrain Basin scheduled for completion in 2011. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.5 MGD.

Effluent loadings are calculated using the following example:

$$\text{CBOD}_5: 8.34 \text{ lb/gal} \times 0.155 \text{ MGD} \times 10 \text{ mg/l} = 12.9 \text{ lb/day}$$

While following the Interim Effluent Limitations, the Monitoring Requirements, Sample Types, and Frequency of Sampling shall be as follows:

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	1/week	Measure
CBOD ₅	1/month	Grab
Total Suspended Solids	1/month	Grab
Ammonia-Nitrogen	1/month	Grab
Fecal Coliform Bacteria	1/month	Grab
pH	1/month	Grab
Mercury	1/quarter	Grab

While following the Final Effluent Limitations, the Monitoring Requirements, Sample Types, and Frequency of Sampling shall be as follows:

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Continuous	Recorder
CBOD ₅	2/month	Grab
Total Suspended Solids	2/month	Grab
Ammonia-Nitrogen	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab
Mercury	1/quarter	Grab

The permittee shall efficiently operate and maintain the treatment facility so as to discharge effluent which does not exceed the INTERIM EFFLUENT LIMITATIONS and MONITORING REQUIREMENTS.

The permittee shall achieve compliance with the FINAL EFFLUENT LIMITATIONS and MONITORING REQUIREMENTS specified in accordance with the following schedule:

ACTIVITY	DATE
Achieve Interim Effluent Limitations and Monitoring Requirements	From the effective date of the permit until such time that the expected flow or the actual flow from the facility reaches 100,000 GPD (0.1 MGD).
Achieve Final Effluent Limitations and Final Monitoring Requirements	After the expected flow or the actual flow from the facility reaches 100,000 GPD (0.1 MGD).

The above listed activities must be achieved on or before the deadline date. Additionally, the Permittee shall submit a report of progress to the Department when compliance is achieved.

The Permittee shall achieve sustained compliance with Final Effluent Limitations.

XIII TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to revoke and reissue a permit for the discharge described in this Statement of Basis.

XIV REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Southeastern Louisiana Water & Sewer Company, LLC, Tallow Creek Sewage Treatment Plant, December 13, 2005.